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MEMORANDUM

TO: THE COMMISSION

FROM: Utilities Division

ORIGINAL

DATE: May 30, 2014

RE: COST-EFFECTIVENESS REVIEW OF MEASURES PROPOSED IN UNS ELECTRIC, INC.'S ENERGY EFFICIENCY IMPLEMENTATION PLAN (DOCKET NO. E-04204A-12-0219)

INTRODUCTION

On June 1, 2012, UNS Electric, Inc. ("UNS Electric" or "Company") filed an application with the Arizona Corporation Commission ("Commission") requesting approval of its 2013 Energy Efficiency Implementation Plan ("EE Plan") and a change to its Demand-Side Management ("DSM") Surcharge. On January 7, 2014, in Decision No. 74262, the Commission approved the EE Plan with modifications. Decision No. 74262 required Commission Utilities Division Staff ("Staff") to re-calculate the cost effectiveness of all of UNS Electric's EE Plan's measures, review and calculate the cost-effectiveness of the new energy efficiency ("EE") measures UNS Electric proposed for its 2013 EE Plan, and file a report and recommendations by May 30, 2014.

Decision No. 74262 further ordered that the DSM Surcharge be lowered to \$0.002660 per kWh and is subject to early reset based on Staff's report of cost-effectiveness of all of the measures.

EE PLAN OVERVIEW

UNS Electric's current EE Plan and its DSM Surcharge were approved by the Commission in Decision No. 74262, dated January 7, 2014. UNS Electric's current EE Plan was approved at a budget level of \$5,388,473. The current DSM Surcharge was set at \$0.002660 per kWh.

Appendix A, included with this memo, is a list of all previous Commission-approved measures and the cost-effectiveness ratio that Staff has re-calculated for those measures.

The Company's proposed EE Plan filed June 1, 2012, sought to modify existing programs by adding new measures. Decision No. 74262 did not approve the implementation of any new measures at that time but directed Staff to evaluate those new measures and report Staff's recommendations regarding the new measures. The table below details those new measures and also details any modifications or terminations that UNS Electric has communicated to Staff.

Arizona Corporation Commission

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Proposed Energy Efficiency Program Modifications, Additions, or Terminations

Residential	
Efficient Products Program	
Residential 2x Incandescent	<ul style="list-style-type: none"> Add a measure providing a rebate for 2x Incandescent light bulbs.
ENERGY STAR® Central Air Conditioner/Heat Pump	<ul style="list-style-type: none"> Add a measure offering a \$300 rebate for installing a central air conditioner/heat pump.
ENERGY STAR® Clothes Washer	<ul style="list-style-type: none"> Add a measure providing a \$100 rebate for purchasing an energy efficient clothes washer.
ENERGY STAR® Dishwasher	<ul style="list-style-type: none"> Add a measure providing a \$10 rebate for purchasing an energy efficient dishwasher.
ENERGY STAR® Refrigerator	<ul style="list-style-type: none"> Add a measure providing a \$20 rebate for purchasing an energy efficient refrigerator.
ENERGY STAR® Room Air Conditioner	<ul style="list-style-type: none"> Add a measure providing a \$35 rebate for purchasing an energy efficient room air conditioner.
Heat Pump Water Heater	<ul style="list-style-type: none"> Add a measure offering a \$400 rebate for installing a heat pump water heater.
Commercial & Industrial	
C&I Facilities/Schools	
Canopy LED	<ul style="list-style-type: none"> Add a measure offering an incentive for installing a canopy LED.
Refrigerated Case LED	<ul style="list-style-type: none"> Add a measure offering an incentive for installing a refrigerated case LED.
Computer Power Monitoring System	<ul style="list-style-type: none"> Add a measure offering an incentive for installing a computer power monitoring system.
Behavioral Programs	
Home Energy Reports	<ul style="list-style-type: none"> Discontinue this measure in 2014.
Residential Financing	<ul style="list-style-type: none"> Discontinue this measure in 2014.

PROPOSED PROGRAM CHANGES**A. Efficient Products Program***Current Program*

The Efficient Products Program promotes the purchase of energy efficient retail products through in-store buy down promotions and the promotion of EE products in general.

THE COMMISSION

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Proposed Changes

UNS Electric had requested to continue the current Efficient Products Program and to add seven new measures (Residential 2x Incandescent, Heat Pump Water Heater, Energy Star Central Air Conditioner, Energy Star Clothes Washer, Energy Star Dishwasher, Energy Star Refrigerator, and Energy Star Room Air Conditioner). The new measures would offer residential customers additional opportunities to reduce energy consumption.

Proposed Budget

The 2014 proposed budget for the Efficient Products Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$416,143	\$396,548
Non-Incentive Cost	\$350,042	\$507,697
Total Program Cost	\$766,185	\$904,245

The last approved budget for this program, approved in Decision No. 74262, was \$766,185 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$741,510. The proposed budget for this program for 2014, as can be seen above, is \$904,245 which represents an increase of \$138,060 over the 2013 budget or roughly an 18% increase.

Recommendations

As can be seen in Appendix A, Staff's analysis demonstrates that all currently approved measures in the Efficient Products Program are found to have a benefit-cost ratio greater than one with the exception of Advanced Power Strips – Load Sensor and Variable Speed Pool Pumps. Staff recommends that these two be discontinued.

In addition to completing a benefit-cost analysis on all existing measures, Staff also completed a benefit-cost analysis on the proposed new measures. The cost-effectiveness ratios for the proposed new measures can be seen in the table below. The Residential 2x Incandescent, Energy Star Central Air Conditioner, Energy Star Clothes Washer, Energy Star Dishwasher, Energy Star Refrigerator, and Energy Star Room Air Conditioner all have benefit-cost ratios of 1.0 or above with the exception of the Residential 2x Incandescent and Energy Star Room Air Conditioner which would both reach a ratio of 1.0 if environmental benefits were monetized. The Heat Pump Water Heater has a benefit-cost ratio of well below one; therefore, Staff does not recommend approval of this measure. Given the increase in the number of available measures, Staff recommends an increase in the Efficient Products Program budget to \$904,245, if the Commission approves all the measures with a benefit-cost ratio of at least 1.0. If the Commission does not approve the new measures, Staff recommends that the budget proposed by the Company be reduced to \$834,727 to reflect removal of the incentives associated with those measures.

Proposed Measure	Ratio
Residential 2x Incandescent	0.95
Heat Pump Water Heater	0.72
Energy Star Central Air Conditioner	1.94
Energy Star Clothes Washer	1.07
Energy Star Dishwasher	2.39
Energy Star Refrigerator	1.08
Energy Star Room Air Conditioner	0.97

B. Residential Appliance Recycling Program

Current Program

This program is designed to remove and recycle inefficient yet functioning refrigerators and freezers.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Residential Appliance Recycling Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$40,250	\$39,000
Non-Incentive Cost	\$184,999	\$94,513
Total Program Cost	\$225,249	\$133,513

The last approved budget for this program, approved in Decision No. 74262, was \$225,249 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$72,101. The proposed budget for this program for 2014 as can be seen above is \$133,513 which represents a decrease of \$91,736 from the 2013 budget or roughly a 41% decrease. The Company is requesting a decrease to the budget as participation has been lower than expected.

Recommendations

The Residential Appliance Recycling Program is comprised of two measures both of which Staff found to have a benefit-cost ratio greater than one (as can be seen in Appendix A). Staff recommends continuation of the Residential Appliance Recycling Program along with approval of the decrease in the budget dollars to \$133,513.

C. Residential New Construction Program*Current Program*

This is an existing program that has been ongoing since 2008. The goal of the program is to award incentives to more energy efficient homes. To qualify, new homes are required to meet the ENERGY STAR version 3 standards which require a Home Energy Rating System ("HERS") score of ≤ 73 .

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Residential New Construction Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$82,500	\$56,000
Non-Incentive Cost	\$156,246	\$42,342
Total Program Cost	\$238,745	\$98,342

The last approved budget for this program, approved in Decision No. 74262, was \$238,745 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$156,414. The proposed budget for this program for 2014 as can be seen above is \$98,342 which represents a decrease of \$140,403 from the 2013 budget or roughly a 59% decrease. The Company is requesting a decrease to the budget as participation levels have been lower than anticipated.

Recommendations

The one approved measure in the Residential New Construction Program is found to have a benefit-cost ratio greater than one. Staff recommends continuation of the Residential New Construction program along with approval of the decrease in the budget dollars to \$98,342.

D. Existing Homes and Audit Direct Install Program

This program is designed to encourage homeowners to increase the energy efficiency of their homes. UNS Electric had proposed to offer five measures in 2014 for the Existing Homes and Audit Direct Install Program (all electric and dual fuel previously shown as separate measures are now displayed as one measure): Air Sealing, Air Sealing & Attic Insulation, Duct Test & Repair, ER HVAC with QI & Duct Sealing, and Shade Screens.

Proposed Budget

The 2014 proposed budget for the Existing Homes and Audit Direct Install is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$399,125	\$490,500	\$399,125
Non-Incentive Cost	\$473,864	\$421,450	\$473,864
Total Program Cost	\$872,989	\$911,950	\$872,989

The last approved budget for this program, approved in Decision No. 74262, was \$872,989 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$866,765. The proposed budget for this program for 2014 as can be seen above is \$911,950 which represents an increase of \$38,961 from the 2013 budget or roughly a 4% increase.

Recommendations

As can be seen in Appendix A, Staff's analysis demonstrates that all currently approved measures, except for Shade Screens and Air Sealing, in the Existing Home and Audit Direct Install Program are found to have a benefit-cost ratio greater than one Air Sealing & Attic Insulation has a benefit-cost ratio of 0.95 but would reach a ratio of 1.0 if environmental benefits were monetized.) Staff recommends continuation of the Existing Homes and Audit Direct Install program, and discontinuing those measures which are not cost-effective at this time. Given the expenses from 2013 being so close to the existing budget and the discontinuation of two measures, Staff recommends that the budget remain at \$872,989 as was previously approved.

E. Shade Tree Program*Current Program*

This is an existing program targeted to residential customers including low-income families allowing them to purchase two desert-adapted, five-gallon trees per year which must be planted on the south, west, or east side of the home. Qualifying tree purchases will result in a \$15.00 credit per tree on their electric bill.

Proposed Changes

The Company had not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Shade Tree Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$14,000	\$19,800
Non-Incentive Cost	\$25,413	\$14,300
Total Program Cost	\$39,413	\$34,100

The last approved budget for this program, approved in Decision No. 74262, was \$39,413 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$31,737. The proposed budget for this program for 2014 as can be seen above is \$34,100 which represents a decrease of \$5,313 from the 2013 budget or roughly a 13% decrease. The Company has lowered the budget to reflect more closely the actual non-incentive costs incurred.

Recommendations

As can be seen in Appendix A, the Shade Tree Program is found to have a benefit-cost ratio slightly higher than one. Staff recommends continuation of the Shade Tree Program along with approval of the decrease in the budget dollars to \$34,100.

F. Residential Low Income Weatherization Program*Current Program*

This program is designed to improve the energy efficiency of homes for customers whose income falls within the defined federal poverty guidelines.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Residential Low Income Weatherization Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$324,000	\$327,320	\$324,000
Non-Incentive Cost	\$27,817	\$46,080	\$27,817
Total Program Cost	\$351,817	\$373,400	\$351,817

The last approved budget for this program, approved in Decision No. 74262, was \$351,817 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$153,701 (according to the Company, the 2013 DSM Program Report for Low Income Weatherization incorporated adjustments from the previous year resulting in an expense reported lower than actual). The proposed budget for this program for 2014 as can be seen above is \$373,400 which represents an increase of \$21,583 from the 2013 budget or roughly a 6% increase.

Recommendations

The Residential Low Income Weatherization Program is found to have a benefit-cost ratio greater than one (as can be seen in Appendix A). The proposed budget for the Low Income Weatherization Program incorporates an incentive of \$2,338 to weatherize 140 homes compared to the budgeted 130 homes the previous year. UNS Electric has found that on average, the weatherization agencies spend below the cap of \$3,000 to weatherize homes. The increase in budget allows for the administration of a greater number of homes. While Staff is in agreement that allowing for a greater number of homes being weatherized is advantageous to the residential customers, Staff also recognizes that UNS Electric reported the completed weatherizing of only 99 households in 2013 and 119 in 2012. Staff recommends continuation of the Residential Low Income Weatherization Program at the currently approved budget level of \$351,817.

G. Residential Multi-Family Program*Current Program*

This program is designed to promote energy efficiency in the residential multi-family sector, on properties with five or more units.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Residential Multi-Family Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$14,725	\$13,567
Non-Incentive Cost	\$48,667	\$28,379
Total Program Cost	\$63,392	\$41,946

The last approved budget for this program, approved in Decision No. 74262, was \$63,392 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$61,384. The proposed budget for this program for 2014 as can be seen above is \$41,946 which represents a decrease of \$21,446 from the 2013 budget or roughly a 34% decrease. The decrease in budget dollars for 2014 can be attributed to saturation of the reach of the program to the existing large scale multi-family housing facilities. In 2014, efforts will be re-directed to aggregating smaller scale multi-family projects.

Recommendations

The Residential Multi-Family Program is comprised of three measures all of which Staff found to have a benefit-cost ratio greater than one (as can be seen in Appendix A). Staff recommends continuation of the Residential Multi-Family Program along with approval of the decrease in the budget dollars to \$41,946.

H. C&I/Schools Facilities

In Decision No. 74262, the Schools Facilities program was combined with the C&I Facilities program. UNS Electric had requested budget approval to continue this combined program.

Proposed Changes

UNS Electric had requested to add three new measures: Canopy LED, Refrigerated Case LED, and Computer Power Monitoring System. The new measures would offer non-residential customers additional opportunities to reduce their energy consumption.

Proposed Budget

The 2014 proposed budget for the C&I/Schools Facilities program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$544,335	\$544,335
Non-Incentive Cost	\$410,011	\$410,011
Total Program Cost	\$954,346	\$954,346

The last approved budget for this program, approved in Decision No. 74262, was \$954,346 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$785,109. The proposed budget for this program for 2014 as can be seen above is \$954,346 which represents no change from the approved 2013 budget.

Recommendations

Staff completed a benefit-cost analysis on all three new measures in addition to all of the existing measures (in Appendix A) offered as part of the C&I/Schools Facilities Program. All of the existing measures were found to have a benefit-cost ratio greater than or equal to one except for Advanced Power Strips – Occupancy Sensors, LED Channel Signs, and Refrigerated Display Gaskets. Staff's ratios for the new measures can be seen in the table below.

Staff recommends discontinuing the Advanced Power Strips -- Occupancy Sensors, LED Channel Signs, and Refrigerated Display Gaskets. While discontinuing three measures, UNS Electric is adding three new measures and asking for the budget to remain at the same level it was approved at in Decision No. 74262. If the Commission approves the three new requested measures, Staff recommends approval for 2014 of the continuation of the budget at the previously approved level of \$954,346. If the Commission does not approve the three new measures, Staff recommends that the budget be reduced to \$894,696, to reflect removal of the incentives associated with those measures.

Measure	Ratio
Canopy LED	1.06
Refrigerated Case LED	1.78
Computer Power Monitoring System	1.12

I. Bid For Efficiency Program

This program is designed so customers or project sponsors can propose their own energy efficiency projects and then bid competitively for incentives within Program guidelines.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Bid For Efficiency Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$240,000	\$240,000	\$240,000
Non-Incentive Cost	\$83,582	\$97,441	\$83,582
Total Program Cost	\$323,582	\$337,441	\$323,582

The last approved budget for this program, approved in Decision No. 74262, was \$323,582 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$200,074. The proposed budget for this program for 2014 as can be seen above is \$337,441 which represents an increase of \$13,859 from the 2013 budget or roughly a 4% increase.

Recommendations

Staff found the Bid For Efficiency Program to be cost-effective (as can be seen in Appendix A). Given the actual expenses incurred for 2013 were less than budgeted, Staff recommends continuation of the Bid For Efficiency Program at the same previously approved budget dollars of \$323,582.

J. Retro-Commissioning Program

The purpose of this program is to identify deficiencies in existing facilities and make necessary adjustments to produce energy savings and other benefits, such as improved occupant comfort.

Proposed Changes

There was no participation in this program in 2013. UNS Electric's initial delivery model for this program included the same program being implemented for Tucson Electric Power ("TEP"). A Retro-Commissioning Program was not approved for TEP. UNS Electric is in the process of re-evaluating its delivery method to remain cost-effective with this program.

Proposed Budget

The 2014 proposed budget for the Retro-Commissioning Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$198,000	\$44,000
Non-Incentive Cost	\$58,352	\$78,116
Total Program Cost	\$256,352	\$122,116

The last approved budget for this program, approved in Decision No. 74262, was \$256,352 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$5,920. The proposed budget for this program for 2014 as can be seen above is \$122,116 which represents a decrease of \$134,236 from the 2013 budget or roughly a 52% decrease.

Recommendations

Staff found the Retro-Commissioning Program to be cost-effective (as can be seen in Appendix A). Given the Company's intention to re-evaluate the delivery method of this program, Staff recommends continuation of the Retro-Commissioning Program along with approval of the decrease in the budget dollars to \$122,116.

K. C&I Demand Response

The purpose of this program is to manage peak demand and mitigate system emergencies through a commercial and industrial load curtailment program. UNS Electric had requested budget approval to continue this program.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the C&I Demand Response program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$0	\$0
Non-Incentive Cost	\$245,052	\$388,544
Total Program Cost	\$245,052	\$388,544

The last approved budget for this program, approved in Decision No. 74262, was \$245,052 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$195,447. The proposed budget for this program for 2014 as can be seen above is \$388,544 which represents an increase of \$143,492 from

the 2013 budget or roughly a 59% increase. UNS Electric anticipates actively recruiting participants in this program in 2014 from the 41 existing C&I customers enrolled on an interruptible rate.

Recommendations

Staff found the C&I Demand Response program to have a benefit-cost ratio greater than one (as can be seen in Appendix A). Staff recommends continuation of the C&I Demand Response program along with approval of the increase in the budget dollars to \$388,544 to allow the Company an adequate amount of time and funding to get this program fully functioning.

L. Home Energy Reports Program

This program utilizes reports designed to instigate behavioral changes in customers' energy consumption.

Proposed Changes

UNS Electric has planned to utilize economies of scale to control the costs of this program by combining it with the Home Energy Reports Program offered by UNS Gas. The Home Energy Reports Program was not approved for UNS Gas. Given that the program was not cost-effective in 2013 (DSM Program Report indicated a benefit-cost ratio of 0.43) and that costs were not spread across both utilities, UNS Electric has notified Staff it will be terminating this program in 2014.

The last approved budget for this program, approved in Decision No. 74262, was \$242,881 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$91,106. UNS Electric's proposed budget for 2014 for this program is \$50,000 to pay expenses needed to terminate the program.

Recommendations

Staff recommends the discontinuation of the Home Energy Reports Program and that \$50,000 be allocated to this program in 2014.

M. Behavioral Comprehensive Program

The purpose of this program is to educate residential customers on how changes in behavior, including purchasing decisions, can improve energy efficiency. This program consists of four subprograms: Direct Canvassing, K-12 Education, Community Education, and CFL Giveaway.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Behavioral Comprehensive Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	2013 (Current)	2014 (Proposed)
Incentives	\$108,845	\$131,366
Non-Incentive Cost	\$120,853	\$152,433
Total Program Cost	\$229,697	\$283,809

The last approved budget for this program, approved in Decision No. 74262, was \$229,697 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$358,267. The proposed budget for this program for 2014 as can be seen above is \$283,809 which represents an increase of \$54,112 from the 2013 budget or roughly a 24% increase.

Recommendations

All four subprograms were found to be cost-effective (as can be seen in Appendix A). Given the high degree of participation and interest in these subprograms, Staff recommends continuation of the Behavioral Comprehensive Program along with approval of the increase in the budget dollars to \$283,809.

N. Education and Outreach Program

This program is responsible for the marketing of the UNS Electric portfolio as a whole, as well as general consumer education about energy efficiency.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Education and Outreach Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$0	\$0	\$0
Non-Incentive Cost	\$141,884	\$161,400	\$141,884
Total Program Cost	\$141,884	\$161,400	\$141,884

The last approved budget for this program, approved in Decision No. 74262, was \$141,884 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$74,336. The proposed budget for this program for 2014 as can be seen above is \$161,400 which represents an increase of \$19,516 from the 2013 budget or roughly a 14% increase.

Recommendations

Staff understands that the Education and Outreach program is not evaluated as a benefit-cost measure but rather is a support program that enables the success of other measures. Given the actual expenses incurred for 2013 were less than budgeted, Staff recommends continuation of the Education and Outreach Program at the same previously approved budget dollars of \$141,884.

O. Residential Energy Financing Program

The purpose of this program is to offer home improvement loans to UNS Electric customers seeking to finance home energy efficiency improvements.

Proposed Changes

No program loans were issued in 2013. UNS Electric has notified Staff it will be terminating this program in 2014 due to a lack of participation.

The last approved budget for this program, approved in Decision No. 74262, was \$275,133 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$2,566. UNS Electric has proposed no budget for this program for 2014.

Recommendations

Staff recommends the discontinuation of the Residential Energy Financing Program and that no budget dollars be allocated to this program in 2014.

P. Codes Support Program

This program strives to maximize energy savings through adherence to local building energy codes and enhanced energy efficient appliance standards.

Proposed Changes

The Company has not proposed any changes to this program.

Proposed Budget

The 2014 proposed budget for the Codes Support Program is detailed below. Overall Program Development, Analysis, and Reporting costs would be allocated across all of the cost-effective energy efficiency programs.

	Current	UNS Electric Proposed	Staff Proposed
Incentives	\$0	\$0	\$0
Non-Incentive Cost	\$18,447	\$36,225	\$18,447
Total Program Cost	\$18,447	\$36,225	\$18,447

The last approved budget for this program, approved in Decision No. 74262, was \$18,447 for 2013. According to the DSM Program Report filed by the Company on March 3, 2014, the actual expenses incurred in 2013 for this program were \$1,872. The proposed budget for this program for 2014 as can be seen above is \$36,225 which represents an increase of \$17,778 from the 2013 budget or roughly a 96% increase.

Recommendations

Staff understands that the Codes Support Program is not evaluated as a benefit-cost measure but rather is a support program that enables the success of other measures. Given the actual expenses incurred for 2013 were less than budgeted, Staff recommends continuation of the Codes Support Program at the same previously approved budget dollars of \$18,447.

BUDGET

UNS Electric 2014 EE BUDGET				
	Current	UNS Proposed	Staff Proposed (with new measures)	Staff Proposed (without new measures)
	2013	2014	2014	2014
<u>Residential Programs</u>				
Efficient Products	\$766,185	\$904,245	\$904,245	\$834,727
Appliance Recycling	\$225,249	\$133,513	\$133,513	\$133,513
Res. New Construction	\$238,745	\$98,342	\$98,342	\$98,342
Existing Homes and Audit Direct Install	\$872,989	\$911,950	\$872,989	\$872,989
Shade Tree	\$39,413	\$34,100	\$34,100	\$34,100
Low Income Weatherization	\$351,817	\$373,400	\$351,817	\$351,817
Multi-Family	\$63,392	\$41,946	\$41,946	\$41,946
Subtotal	\$2,557,790	\$2,497,496	\$2,436,952	\$2,367,434
<u>C&I Programs</u>				

C&I Facilities	\$954,346	\$954,346	\$954,346	\$894,696
Bid for Efficiency-Pilot	\$323,582	\$337,441	\$323,582	\$323,582
Retro-Commissioning	\$256,352	\$122,116	\$122,116	\$122,116
C&I Demand Response	\$245,052	\$388,544	\$388,544	\$388,544
Subtotal	\$1,779,332	\$1,802,447	\$1,788,588	\$1,728,938
<u>Behavioral Programs</u>				
Home Energy Reports	\$242,881	\$50,000	\$50,000	\$50,000
Behavioral Comprehensive Program	\$229,697	\$283,809	\$283,809	\$283,809
Subtotal	\$472,578	\$333,809	\$333,809	\$333,809
<u>Support Programs</u>				
Education and Outreach	\$141,884	\$161,400	\$141,884	\$141,884
Residential Energy Financing	\$275,133	\$0	\$0	\$0
Codes Support	\$18,447	\$36,225	\$18,447	\$18,447
Program Development, Analysis and Reporting	\$143,308	\$200,000	\$200,000	\$200,000
Subtotal	\$578,772	\$397,625	\$360,331	\$360,331
Total	\$5,388,472	\$5,031,377	\$4,919,680	\$4,790,512

The above table details UNS Electric's proposed energy efficiency budget for 2014 and Staff's recommended budgets with and without approval of the new measures.

DSM SURCHARGE

Decision No. 74262 set the current DSM Surcharge at \$0.002660 per kWh. The Decision further directed Staff to re-evaluate the current DSM Surcharge after re-calculating the cost-effectiveness of UNS Electric's currently approved energy efficiency measures.

The chart below details UNS Electric's DSM Surcharge collections and expenses since 2008 and the impact on the under/over balance if no change is made to the DSM Surcharge in 2014.

Year	DSM Expenses	Performance Incentive	DSM Surcharge Collection	Annual Under/Over Collection Balance
2008	\$461,445	N/A	\$568,168	(\$106,723)
2009	\$1,436,777	N/A	\$1,198,367	\$238,410
2010	\$1,784,322	N/A	\$1,595,795	\$188,527
2011	\$2,113,396	\$191,462	\$1,752,607	\$552,251
2012	\$4,507,014	\$387,954	\$6,847,151	(\$1,952,183)
2013	\$3,874,609	\$345,113	\$7,160,031	(\$2,940,309)
2014*	\$4,919,681	\$451,188	\$4,466,413	\$904,456
TOTAL	\$19,097,244	\$1,375,717	\$23,588,532	(\$3,115,571)

*Estimated 2014 Expenses, Performance Incentive, and DSM Surcharge collection

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As of the end of March 2014, UNS Electric was over-collected approximately \$4.3 million in its DSM Surcharge collections compared to expenses.

Given the estimation as can be seen above that UNS Electric will only have returned approximately \$900,000 of the over collection by the end of 2014, Staff recommends that the DSM Surcharge be reduced further to \$0.001500 per kWh. This would result in a monthly decrease of approximately \$0.99 for the average residential customer using 855 kWh in a month. This would also result in approximately \$1.7 million of the over collection being returned by the end of 2014.

Staff also recommends that this surcharge remain in effect until UNS Electric's next Energy Efficiency Implementation Plan is approved or until the next adjustor reset filing. At that time, the amount of over collection having been returned would be evaluated again to gauge if a further reduction is necessary.



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Appendix A

Staff Calculated Benefit-Cost Ratios for UNS Electric Energy Efficiency Programs

Sector	Program Name	Measure Name	Status of Measure	Benefit-Cost Ratio
Residential	Efficient Products	Advanced Power Strips - Load Sensor	existing	0.80
Residential	Efficient Products	ES Integral CFL	existing	2.23
Residential	Efficient Products	Pool Pump Timers	existing	1.95
Residential	Efficient Products	Residential 2x Incandescent	new	0.95
Residential	Efficient Products	Heat Pump Water Heater	new	0.72
Residential	Efficient Products	Energy Star Central Air Conditioner	new	1.94
Residential	Efficient Products	Energy Star Clothes Washer	new	1.07
Residential	Efficient Products	Energy Star Dishwasher	new	2.39
Residential	Efficient Products	Energy Star Refrigerator	new	1.08
Residential	Efficient Products	Energy Star Room Air Conditioner	new	0.97
Residential	Efficient Products	Variable Speed Pool Pump	existing	0.90
Residential	Appliance Recycling	Freezer Recycling	existing	1.66
Residential	Appliance Recycling	Refrigerator Recycling	existing	1.66
Residential	Residential New Construction	Energy Smart Homes	existing	1.70
Residential	Existing Home	Air Sealing	existing	0.86
Residential	Existing Home	Air Sealing & Attic Insulation	existing	0.95
Residential	Existing Home	Duct Test and Repair	existing	1.13
Residential	Existing Home	ER HVAC with QI & Duct Sealing	existing	1.10
Residential	Existing Home	Shade Screens	existing	0.57
Residential	Shade Trees	Shade Trees	existing	1.05
Residential	LIW	LIW	existing	1.02
Residential	Multi-Family	ES Integral CFL	existing	1.80
Residential	Multi-Family	Faucet Aerators - Electric WH only	existing	2.42
Residential	Multi-Family	Low Flow Showerheads - Electric WH only	existing	2.04
C&I	C&I/Schools Facilities	14 SEER Packaged and Split AC's	existing	1.19
C&I	C&I/Schools Facilities	14 SEER Packaged and Split HP's	existing	2.03
C&I	C&I/Schools Facilities	15 SEER Packaged and Split AC's	existing	1.12
C&I	C&I/Schools Facilities	15 SEER Packaged and Split HP's	existing	2.00
C&I	C&I/Schools Facilities	16 SEER Packaged and Split AC's	existing	1.06
C&I	C&I/Schools Facilities	16 SEER Packaged and Split HP's	existing	1.89
C&I	C&I/Schools Facilities	Advanced Power Strips - Load Sensor	existing	1.22
C&I	C&I/Schools Facilities	Advanced Power Strips - Occupancy Sensors	existing	0.80
C&I	C&I/Schools Facilities	Advanced Power Strips - Timer Plug Strip	existing	2.78
C&I	C&I/Schools Facilities	Anti sweat heater controls	existing	1.96
C&I	C&I/Schools Facilities	Custom Measures	existing	1.91
C&I	C&I/Schools Facilities	Daylighting controls	existing	1.00
C&I	C&I/Schools Facilities	Delamping	existing	6.91
C&I	C&I/Schools Facilities	Energy efficient exit signs	existing	1.26
C&I	C&I/Schools Facilities	Evaporator Fan Controls*	existing	1.35
C&I	C&I/Schools Facilities	Exterior HIDs to T8/T5	existing	2.63
C&I	C&I/Schools Facilities	Hard Wire CFL	existing	1.15
C&I	C&I/Schools Facilities	High Efficiency Evaporator Fan Motors (ECM)	existing	1.69
C&I	C&I/Schools Facilities	High Efficiency Evaporator Fan Motors (PSC)	existing	2.06
C&I	C&I/Schools Facilities	Induction Lighting	existing	1.02
C&I	C&I/Schools Facilities	Integral Screw In CFL	existing	1.38
C&I	C&I/Schools Facilities	Integrated Refrigerated Controls and Motor Retro-fits*	existing	1.62
C&I	C&I/Schools Facilities	Interior HIDs to T8/T5	existing	3.45
C&I	C&I/Schools Facilities	LED Channel Signs	existing	0.74
C&I	C&I/Schools Facilities	Occupancy sensors	existing	1.33
C&I	C&I/Schools Facilities	Outdoor CFL	existing	3.58
C&I	C&I/Schools Facilities	Premium T8 Lighting	existing	1.49
C&I	C&I/Schools Facilities	Programmable Thermostats	existing	3.64
C&I	C&I/Schools Facilities	Reduced LPD	existing	1.34
C&I	C&I/Schools Facilities	Refrigerated Display Automatic Door Closers	existing	2.76
C&I	C&I/Schools Facilities	Refrigerated Display Gaskets	existing	0.83
C&I	C&I/Schools Facilities	Screw in cold cathode CFL	existing	2.31
C&I	C&I/Schools Facilities	Shade Screens	existing	1.00
C&I	C&I/Schools Facilities	Standard T8 Lighting	existing	1.04
C&I	C&I/Schools Facilities	Variable Speed Drives	existing	2.70
C&I	C&I/Schools Facilities	Vending Miser - Beverage Case Controls	existing	2.19
C&I	C&I/Schools Facilities	Vending Miser - Reach-in Cooler Controls	existing	2.41
C&I	C&I/Schools Facilities	Vending Miser - Snack Machine Controls	existing	1.41
C&I	C&I/Schools Facilities	Window Films	existing	1.43
C&I	C&I/Schools Facilities	Canopy LED	new	1.06
C&I	C&I/Schools Facilities	Computer Power Monitoring System	new	1.78
C&I	C&I/Schools Facilities	Refrigerated Case LED	new	1.12
C&I	Bid For Efficiency	Bid For Efficiency	existing	1.79
C&I	Retro-Commissioning	Retro-Commissioning	existing	1.37
C&I	C&I Direct Load Control	C&I Direct Load Control (Demand Response)	existing	2.66
Behavioral Programs	Home Energy Reports	Home Energy Reports	terminating	n/a
Behavioral Programs	Behavioral Comprehensive Program	CFL Outreach Promotion (13W CFLs)	existing	1.70
Behavioral Programs	Behavioral Comprehensive Program	Community Education Kit	existing	1.86
Behavioral Programs	Behavioral Comprehensive Program	Direct Canvassing	existing	1.78
Behavioral Programs	Behavioral Comprehensive Program	K-12 Education Kit	existing	3.65
Support Program	Education and Outreach	Education and Outreach	existing	n/a
Support Program	Residential Financing	Residential Financing	terminating	n/a
Support Program	Codes Support	Codes Support	existing	n/a

*These two C&I measures were inadvertently omitted from Appendix A to Decision No. 74262 dated January 7, 2014. These two measures were previously approved in Decision No. 70524 dated September 30, 2008.